

*REMARKS*

Claims 1-20 are pending in this application. Claims 11-15 are merely objected to, but otherwise stand allowable over the prior art of record. Claims 1-10 and 16-20 are rejected and are at issue herein. Reconsideration of claims 1-20 and indication of their allowability in view of the following remarks are respectfully solicited.

The applicant acknowledges the withdrawal of the indication of allowability of claims 4-10 and 17-20 in view of the newly discovered reference to Welch (U.S. Patent No. 2, 838,646). However, as will be discussed more fully below, the Welch '646 reference does not teach the use of an infinite switch energy regulator whatsoever, but instead utilizes a constant speed motor driven cam to vary the duty cycle during which power is applied to a surface heating element. While Welch '646 does provide an infinitely variable control switch that includes both high voltage power and low voltage power to the heating element in different heating modes, those skilled in the art recognize the distinction between an infinite switch energy regulator as described and claimed in the claims of the instant application and the motor driven cam duty cycle adjustment provided for in the Welch '646 system. As such, the applicant respectfully submits that the withdrawal of the allowability of claims 4-10 and 17-20 in view of Welch '646 is erroneous. Reconsideration of this withdrawal in view of Welch '646 and indication of the allowability of claims 4-10 and 17-20 are respectfully solicited.

The Examiner has rejected claims 1-8 and 16 under 35 U.S.C. §102(b) as being anticipated by Welch '646. The applicant has thoroughly considered the teachings of Welch '646 and the Examiner's application thereof to the claims of the present application, but must respectfully traverse this ground of rejection. Reconsideration of this ground of rejection and indication of the allowability of claims 1-8 and 16 in view of the following remarks are respectfully solicited.

As recognized by the Examiner, independent claim 1, independent claim 4, and independent claim 16 all require the use of an infinite switch. To meet this limitation the Examiner has cited to Welch '646, column 3, lines 47-52. However, close examination of this cited section reveals a description of the constant speed rotary cam 24 that is driven by a constant speed motor 2. While this constant speed rotary cam 24 does work in conjunction with a manually adjustable cam 26, the application and removal of the appropriate energy source is actually controlled by the constant speed rotary cam that is being rotated by the constant speed

motor 2. See Welch '646, column 2, lines 69 – column 3, line 17. That is, instead of utilizing an infinite switch to control the duty cycle during which the appropriate power level is applied to the heating element, the system of Welch '646 utilizes a constant speed rotary cam that is driven by a constant speed motor. This is a completely different technology for the control of duty cycle than that utilized by the applicant and claimed in the claims of the present application. As such, it cannot be said that Welch '646 anticipates the claims of the present application because it does not include each and every limitation of the claims of the present application. As such, the applicant respectfully submits that this ground of rejection is erroneous and should be removed.

In applying this ground of rejection it appears that the Examiner has confused the infinitely variable control provided by the system of Welch '646 through the utilization of a constant speed motor driving a constant speed rotary cam and the infinite switch 14 required by the claims of the present invention. The applicant wishes to direct the Examiner's attention to paragraph [30] which describes the construction and operation of an infinite switch. As will be apparent from an analysis of this paragraph, an infinite switch includes an internal heater which causes the cycling of internal contacts by heating bi-metallic material. Such an infinite switch does not include a rotatable cam driven by a constant speed motor to control the duty cycle of power application to the surface burner. Since the infinite switch is a completely different component than a motor driven cam, the applicant respectfully submits that such a motor driven cam cannot anticipate the infinite switch as required by the claims of this application. Therefore, reconsideration of this ground of rejection in view of the vastly different technology between an infinite switch and a constant speed motor driven cam and allowance of claims 1-8 and 16 are respectfully solicited.

The Examiner has rejected claims 9 and 10 under 35 U.S.C. §103(a) as being unpatentable over Welch '646 in view of Grunert (U.S. Patent No. 5,219,070). The applicant has thoroughly considered the teachings of each of these references and the Examiner's application thereof to claims 9 and 10, but must respectfully traverse this ground of rejection. Reconsideration of this ground of rejection and indication of the allowability of claims 9 and 10 at an early date are respectfully solicited.

Claims 9 and 10, through their dependency, also require the inclusion of an infinite switch energy regulator. However, as discussed above, Welch '646 fails to teach the usage of an infinite switch, instead utilizing a constant speed motor driven cam to vary the duty cycle of the application of power to the surface burner. As such, and because Grunert '070 does not

In re Appln. Of: Charles A. Garris III  
Application No.: 10/058,350

overcome this deficiency, the applicant respectfully requests reconsideration of this ground of rejection. Reconsideration of this ground of rejection in view of the failure of either of these references taken alone or in combination to teach the usage of an infinite switch energy regulator and indication of the allowability of claims 9 and 10 are respectfully solicited.

The Examiner has also rejected claims 17-20 under 35 U.S.C. §103(a) as being unpatentable over Welch '646. As indicated above, the applicant has thoroughly considered the teachings of Welch '646, and therefore must respectfully traverse this ground of rejection. Reconsideration of this ground of rejection and indication of the allowability of claims 17-20 at an early date are respectfully solicited.

It is axiomatic in the patent law that in order to form a *prima facie* case of obviousness the reference or references must teach each and every limitation of the claims being rejected. However, as discussed at length above, the infinitely variable control switch of Welch '646 does not utilize an infinite switch, but instead varies the duty cycle by utilizing a constant speed motor driving a constant speed rotary cam. As is apparent, a constant speed rotary motor driven cam is not an infinite switch. As such, Welch fails to teach each and every element of the claims as specifically required for a *prima facie* case of obviousness. Reconsideration of this ground of rejection and indication of the allowability of claims 17-20 at an early date are therefore respectfully solicited.

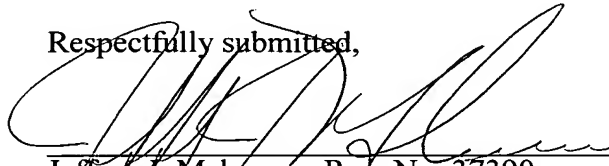
The applicant wishes to thank the Examiner for her thorough consideration of claims 11-15 and the indication of their allowability over the prior art of record. While the Examiner has indicated that claims 11-15 are objected to as being dependent upon a rejected base claim, the applicant respectfully submits that no amendment to these claims is required in view of the failure of Welch '646 to teach an infinite switch energy regulator as specifically required by these claims through their dependency from claim 4. As such, the applicant respectfully requests reconsideration of these claims and indication of their allowability in their present form.

In view of the above, the applicant respectfully submits that claims 1-20 are in condition for allowance. Reconsideration of claims 1-20 and indication of their allowability at an early date in view of the foregoing remarks are respectfully solicited.

In re Appln. Of: Charles A. Garris III  
Application No.: 10/058,350

If the Examiner believes that a telephonic conversation will aid in the resolution of any issues not resolved herein, the Examiner is invited to contact the applicant's attorney at the telephone number listed below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Jeffrey J. Makeever', is written over a horizontal line.

Jeffery J. Makeever, Reg. No. 37390  
LEYDIG, VOIT & MAYER, LTD.  
6815 Weaver Road, Suite 300  
Rockford, Illinois 61114-8018  
(815) 963-7661 (telephone)  
(815) 963-7664 (facsimile)

Date: April 25, 2005